

DETAILED ACTION

1. This office action is in response to the Amendment filed on October 28, 2009. Claims 5-8 and 11-26 are pending in this application. Claims 5, 17, and 23 are currently amended. Claims 1-4 and 9-10 have been cancelled. Claim 11 has been rejoined.

Election/Restrictions

2. Claim 5 is directed to an allowable product. Pursuant to the procedures set forth in MPEP § 821.04(b), claim 11, directed to the process of using the allowable product, previously withdrawn from consideration as a result of a restriction requirement, is hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Because a claimed invention previously withdrawn from consideration under 37 CFR 1.142 has been rejoined, **the restriction requirement between groups II and III as set forth in the Office action mailed on April 4, 2009 is hereby withdrawn.** In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard Treanor on January 7, 2010 and confirmed on January 11, 2010.

4. The application has been amended as follows:

Claim 5, line 10, cancel/remove the amines: bis-2-aminoethyl ether and N,N-dimethylethylenediamine;

Claim 5, line 11, cancel/remove the amines: ethylenediamine and N,N-dimethylaminopropylamine;

Claim 5, line 13, cancel/remove the amine: diethylenetriamine;

Claim 5, line 14, cancel/remove the amines: dipropylenetriamine and triethylenetetraamine;

Claim 5, line 16, cancel/remove the amine: tetraethylenepentaamine;

Claim 23, line 10, cancel/remove the amines: bis-2-aminoethyl ether and N,N-dimethylethylenediamine;

Claim 23, line 11, cancel/remove the amines: ethylenediamine and N,N-dimethylaminopropylamine;

Claim 23, line 13, cancel/remove the amines: diethylenetriamine, dipropylenetriamine and triethylenetetraamine;

Claim 23, line 14, cancel/remove the amine: tetraethylenepentaamine;

Renumber the claims such that: claim 5 is now claim 1, claim 6 is now claim 2, claim 7 is now claim 3, claim 8 is now claim 4, claim 11 is now claim 5, claim 12 is now claim 6, claim 13 is now claim 7, claim 14 is now claim 8, claim 15 is now claim 9, claim 16 is now claim 10, claim 17 is now claim 20, claim 18 is now claim 11, claim 19 is now claim 12, claim 20 is now claim 13, claim 21 is now claim 14, claim 22 is now claim 15, claim 23 is now claim 19, claim 24 is now claim 16, claim 25 is now claim 17, and claim 26 is now claim 18;

Fix claim dependency based on renumbering:

- For previously numbered claims 6-8, 12-16, 18-22, and 24-26, change “as claimed claim 5” to – as claimed in claim 1 --;
- For previously numbered claim 11, change “according claim 5” to -- according to claim 1;
- For previously numbered claim 17, change “as claimed claim 23” to -- as claimed in claim 19”.

Allowable Subject Matter

5. Claims 5-8 and 11-26 are allowed.
6. The following is an examiner’s statement of reasons for allowance:

The present claims are allowable over the closest reference: Kinoshita et al. (JP-11277887, accessed in English by machine translation).

Kinoshita et al. discloses a cationic resin obtained by the reaction of an amine compound and epihalohydrin which have two or more amino groups, where epichlorohydrin can be used as the epihalohydrin (see para. 0004, 0006 and 0007). As for the quantity of the amine compound with has two or more amino groups and epihalohydrin, it is preferred that it is the equivalent mostly (see para. 0008). Kinoshita et al. teaches simple alkyl amines such as ethylenediamine, diethylenetriamine, triethylenetetraamine, etc. (see para. 0006). However, Kinoshita fails to teach or reasonably suggest the instantly claimed branched and cyclic amine compounds for use in the polymer, wherein the two different amines are selected from the group consisting of benzylamine, piperazine, methylbis(3-aminopropyl)amine, methylbis(2-aminoethyl)amine, N-(2-aminoethyl)piperazine, N-aminoethylpiperazine, 4,7-dimethyltriethylenetetraamine, and dimethylaminopropylamine.

In light of the above discussion, it is evident as to why the present claims are patentable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATIE HAMMER whose telephone number is (571)270-7342. The examiner can normally be reached on Monday to Friday, 10:00am EST to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/KLH/